

Ser. No. 09/914,005

Atty. Dkt. No. WEB 0044 PA

REMARKS

A new Abstract has been submitted. No new matter has been added.

The Examiner has rejected claims 16-27 and 29-34 under 35 U.S.C. §103(a) as being unpatentable over Siggel et al. (US 4,380,594) in view of Klotzer et al (5,980,795). Regarding independent claim 16, the Examiner has failed to present a *prima facie* case of obviousness. According to the MPEP §706.02(j), to meet a threshold showing of *prima facie* obviousness, the Examiner must make three showings. The showings are: that there is some suggestion or motivation to modify or combine the references; that there is a reasonable expectation of success; and that the prior art references teach or suggest all of the claimed limitations.

The Examiner has failed to show that there is some suggestion or motivation to combine Siggel and Klotzer. Siggel relates to filaments having adjacent, separate, discontinuous cavities (Col. 1, lines 9-12). The filaments are formed by melting a polymer, mixing the melt with a gas or gas forming substance, and extruding the polymer melt through spinnerets (Col. 2, lines 4-19). The polymer melt includes up to 1 weight % silicone oil (Col. 2, lines 4-19). Siggel does not teach or suggest that the filaments are porous and suitable to act as a membrane. Instead, the filaments of Siggel exhibit a "substantially whole outer covering" and have "practically no 'burst' cavities" (Col. 7, lines 62-66; Col. 8, lines 56-60). Thus, a liquid or gas would not pass through the cavities of the filaments, and the filaments could not act as a membrane. Nowhere does Siggel teach or suggest that the filaments are porous or may act as a membrane.

Klotzer relates to methods of forming hollow fiber membranes that are suitable for use in biotechnological areas (Col. 4, lines 4-12). The membranes of Klotzer are porous, and the methods of Klotzer all relate to forming porous membranes (Col. 4, lines 60-62). Thus, one having skill in the art would have no motivation to combine Siggel and Klotzer as the Examiner suggests. Siggel relates to non-porous filaments while Klotzer relates to porous membranes. One skilled in the art would not look to Siggel to teach forming membranes. Additionally, one skilled in the art would have no motivation to combine the teachings of Siggel with Klotzer because they relate to two completely separate processes and products.

Ser. No. 09/914,005

Atty. Dkt. No. WEB 0044 PA

Additionally, the Examiner has failed to show that the prior art teaches or suggests each and every aspect of the claimed invention. For example, the Examiner has not shown that the prior art teaches or suggests "said polymer or mix of polymers containing from about 0.05 to about 4.5% by weight of a fluid that dissolves or swells the polymer or mix of polymers." Siggel teaches including silicone oil in a polymer melt (Col. 2, lines 4-19). The silicone oil may comprise up to 1 weight % of the weight of the melt (Id.). Siggel does not teach or suggest the silicone "dissolves or swells the polymer or mix of polymers." Silicone oil does not dissolve or swell the polymers of Siggel. Instead, the silicone oil of Siggel is "obviously to improve the glidding properties of the polypropylene in the extruder, and possibly also to enable it to function to a certain extent as a plasticizer" (Col. 4, lines 53-57). Thus, Siggel does not teach or suggest a fluid that dissolves or swells the polymer or mix of polymers. Klotzer also does not teach or suggest a fluid that dissolves or swells the polymer or mix of polymers.

Therefore, the Examiner has not provided a *prima facie* case of obviousness with regard to independent claim 16. Claims 17-27 and 29-34 depend from independent claim 16. Thus, claims 16-27 and 29-34 are patentable over the cited prior art.

The Examiner rejected claim 28 under 35 U.S.C. §103(a) as being unpatentable over Siggel in view of Klotzer and further in view of Malon et al. (US 5,013,767). The Examiner has failed to present a *prima facie* case of obviousness. As discussed above, there is no motivation or suggestion to combine Siggel and Klotzer as the Examiner suggests. The Examiner has additionally failed to show that there is a motivation or suggestion to combine Siggel, Klotzer, and Malon. Malon relates to methods of forming membranes using a solvent system of two non-solvents and one or more solvents (Col. 4, lines 45-53). The method taught in Malon relies on phase inversion of polymer solutions to form the membranes (Col. 2, lines 30-60). Thus, the method taught in Malon does not rely on gas charging and foaming as taught in Siggel and Klotzer. One skilled in the art would not combine the filament formation method of Siggel with the membrane phase inversion method of Malon. The methods are directed at forming different products in two distinct manners. There is no motivation to combine Siggel, Klotzer, and Malon.

Finally, the Examiner has failed to show that the references teach each and every aspect of the claimed invention. As discussed above, neither Siggel nor Klotzer teach or

Ser. No. 09/914,005

Atty. Dkt. No. WEB 0044 PA

suggest "said polymer or mix of polymers containing from about 0.05 to about 4.5% by weight of a fluid that dissolves or swells the polymer or mix of polymers." Malon shows the polymer solutions comprising between 70 and 85 weight percent of the solvent (Col. 20, lines 5-45). Nowhere does Malon teach or suggest that the polymer or mix of polymers contain from about 0.05 to about 4.5% by weight of a fluid that dissolves or swells the polymer or mix of polymers. Thus, claim 28 is patentable over the cited and applied prior art.

Ser. No. 09/914,005

Atty. Dkt. No. WEB 0044 PA

CONCLUSION

Applicants respectfully submit that, in view of the above amendments and remarks, the application is now in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

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